

Work Order ID 66023

Tuesday, February 01, 2011 3:31:01 PM

Page 1

PRELIMINARY ISSUE

Item ID: D4093-3

Revision ID:

Item Name: Bracket

Start Date: 2/1/2011 Start Qty: 2.00

Required Date: 2/7/2011 Req'd Qty: 2.00

Reference:

Approvals:

Process Plan: *P*

Date: 11-02-1

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Cust Item ID:

Customer:



Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4093

PBI 11.02.02

110

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

CUT AS DWG

DWG REV: *PBI*

PROG REV: *PBI*

DEBURR

B 11-2-3

Q

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

B 11-2-3

**MATERIAL CERTIFICATION
REQ'D UPON DELIVERY**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 66023

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Item ID: D4093-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 2/1/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 2/7/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00 - inspect 10 PB1



QC

Memo

0.00

Dry only

Quality Control

8/12/04

(R)

132

Memo

0.00



Small Fab

DRILL AS PER DWG

0.00

11.2-3

2

Small Fab

135

QC5- Inspect part completeness to step on W/O

0.00 - inspect 10 PB1



QC

Memo

0.00

Dry only

Quality Control

8/12/04

(R)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Tuesday, February 01, 2011 3:31:01 PM



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Item ID: D4093-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 2/1/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 2/7/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00

⇒-H

11/02/01

2

φ



HandFinish

Memo

0.00

Hand Finishing

150

~~White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum~~

0.00



Powdercoat

Memo

0.00

N/A. Ins/11-02-03
This Batch only

Powder Coating

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

2 BR 11-02-11

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 66023

Tuesday, February 01, 2011 3:31:01 PM

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Item ID: D4093-3

Accept

Setup Start

Revision ID:

Stop

Item Name: Bracket

Start Date: 2/1/2011 Start Qty: 2.00

Cust Item ID:

Required Date: 2/7/2011 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

2 LA in 3A

0.00

Packaging

1 SUP BVA

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

MF
11-02-04

RTP340

POSITIVE RECALL
EFFECTIVE 11-02-02 AUTH
RELEASED DATE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, February 01, 2011 3:31:12 PM

Page 1

Work Order ID: 66023

Parent Item: D4093-3

Parent Item Name: Bracket



Start Date: 2/1/2011

Required Date: 2/7/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 10-10-04 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.750X06.00 0		Purchased	No			100	f'	28.5800	1	2			



6061T6 BAR .750 X 6.00



B 11-2-3

6061 1.X13 "Pull 11-02-08
this batch
only"

Location

MAT03

Loc Qty

28.58

28.58

Loc Code

112567

11329A

11329A

②

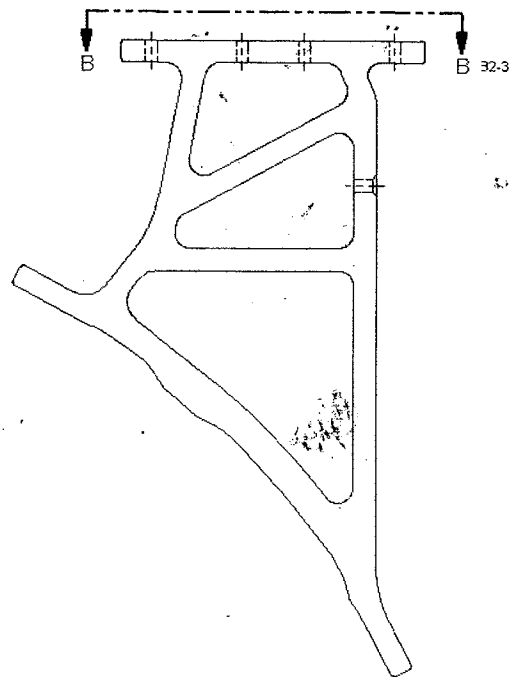
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

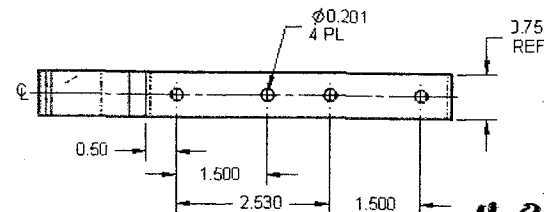
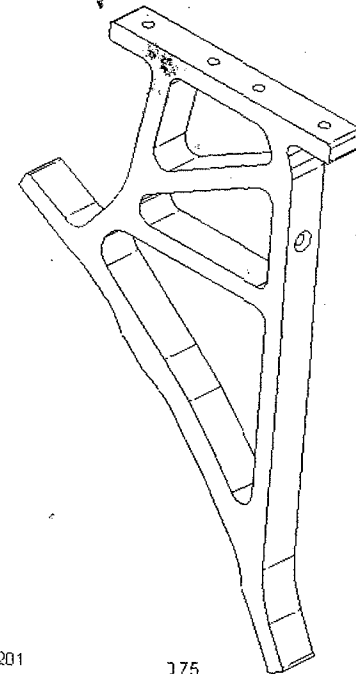
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



w/o 66023



SECTION VIEW B-B B5-3

D4093-3 BRACKET



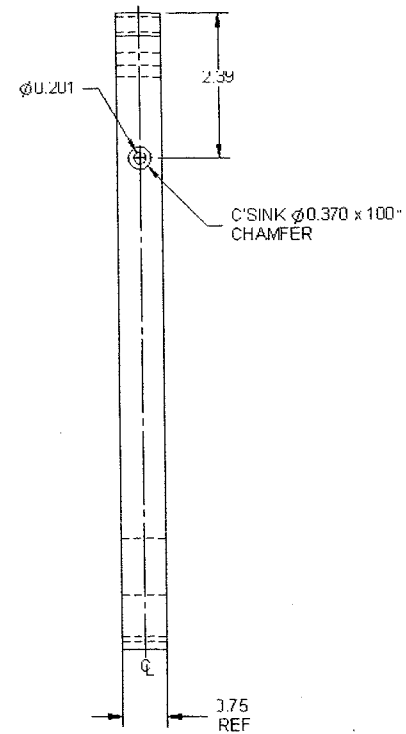
NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.01 lbs

PRELIMINARY ISSUE

11.01.31

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, VA	
CHECKED		DRAWING NO.	REV. PB1
MFG. APPR.		D4093	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
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PB1

~~7~~ 11.01.31

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. PB1
MFG. APPR.		D4093	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE		COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.	
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DART AEROSPACE LTD		Work Order: 64023
Description: BRACKET		Part Number: D4093-3
Inspection Dwg: D4093-3, Rev: PBI		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒

First Article

☒

Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.00	+/- .030	.992	✓		✓ ISO2	
1.12	+/- .030	1.123	✓		✓	
1.39	+/- .030	1.382	✓		✓	
3.64	+/- .030	3.64	✓		✓	
3.75	+/- .030	3.78	✓		✓	
3.85	+/- .030	3.862	✓		✓	
4.08	+/- .030	4.071	✓		✓	
5.03	+/- .030	5.011	✓		✓	
.89	+/- .030	.900	✓		✓	
1.79	+/- .030	1.781	✓		✓	
.38	+/- .030	.385	✓		✓	
1.09	+/- .030	1.09	✓		✓	
1.53	+/- .030	1.513	✓		✓	
2.23	+/- .030	2.235	✓		✓	
3.80	+/- .030	3.808	✓		✓	
7.62	+/- .030	7.613	✓		✓	
10.45	+/- .030	10.444	✓		PROW302	
.38	+/- .030	.370	✓		✓	
.60	+/- .030	.607	✓		✓	
.51	+/- .030	.506	✓		✓	

Measured by: AB
Date: 11-2-3

Audited by: S
Date: 11/2/04

Prototype Approval:
Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



Magna Stainless

5775 Kieran St, Saint-Laurent, Quebec H4S 0A3
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105



PACKING LIST

Page 1 of 1

I020155*

SOLD TO:
DART AEROSPACE LTD
1270 ABERDEEN STREET

SHIP TO:
DART AEROSPACE LTD
1270 ABERDEEN STREET

HAWKESBURY, ON
K6A 1K7
Contact: CHANTAL

HAWKESBURY, ON
K6A 1K7
Ship Terms: PREPAID



MTR:Y

SPECIAL INSTRUCTIONS

Currency		Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS		ERYCK BLAIS	(613) 632-5200	(613) 632-1053	P010641	
Sales Order	Terms		Ship Via	Date Ordered	Date Required	Date Shipped
W021800	NET 30 DAYS		NIR:R-557065-1	11/20/09	11/27/09	11/27/09

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
1		PC	ALUMINUM - LB 6061-T6 1" X 13" X 48" <i>69/4/27</i>	65 LB / 1 PC L033729	S29060337	1
Skids: 1				Approx Weight:	65 LB	

Received by: _____ Date: _____ Signature: _____

MILL TEST CERTIFICATE	No: 3887	CERTIFIED SRAC-IQNet	vimetco SLATINA
	Date: 7/20/2009	ISO 9001/2001 No. 10/4-2008	

CUSTOMER :

CONTRACT/ORDER : P.O. 1555
BILL OF DELIVERY : 80048392
TRUCK/CONTAINER : TRLU 5008790

SHIPMENT OF 43,254.731 LBS ALUMINIUM PLATES BRUSHED SURFACE AND SHEETS MILL FINISH IN ALLOY 6061 T651/T6, ACCORDING TO ASTM B-209-07, AMS-QQ-A250/11 ED. 1997, AMS 4027N ED. 2008, ANSI H35.2-2006 FROM CONSTANTA ROMANIA TO TORONTO, CANADA

MATERIAL : ALUMINIUM PLATES

ALLOY : 6061

DIMENSIONS (mm) : 70015089

1.00" THX 48.50" WDX 144.50" LT

TEMPER: T651

ACCORDING TO : ASTM B209; AMS-QQ-A-250/11; AMS 4027N; ANSI H35.2

ACTUAL MECHANICAL PROPERTIES												1 MPa = 1 N/mm ² = 0.145 ksi = 0.102 kgf/mm ²	
1 lbs = 0.4536 kg				UTS		YTS		Elong. %		Hardness			
				KSI		KSI		50mm		HB			
Specified values:				min.	max.	min.	max.	min.	max.	min.	max.		
				42		35		9					
LOT / BATCH	CASE	NET WEIGHT lbs	Measured values:										
70015089 S29060337 ✓	15469;15475	4,973.633	45.7		40.5		14						
			45.4		40.4		14						
ACTUAL CHEMICAL ANALYSIS %													
BATCH	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	Al	
S29060337	0.75	0.36	0.26	0.06	0.97	0.08	0.007	0.037	0.012	0.012	0.013	REM.	
												REM.	
Acc. Standard	Min.	0.4		0.15		0.8	0.04					REM.	
	Max.	0.8	0.7	0.4	0.15	1.2	0.35	0.05	0.25	0.15	0.05	0.05	
Remarks:						Other- Each- Max.: 0.05			Others Total- Max.: 0.15				

REMARKS:

ACCORDING TO: ASTM B 209-2007; AMS-QQ-A 250/11:1997; AMS 4027N:2008; ANSI H35.2-2006

We hereby certify that the material detailed hereon has been produced and tested according to the requirements of the relevant specification and/or order. Keep in dry conditions, without large temperatures variations. The differences between metal and air must be maxm 11 degrees C.

According to EN 10204:2004 3.1

QUALITY CONTROL DEPT.

ALRO S.A. No.116, Pilesti Street Phone: +(40) 0249 435 117; 0249 432 956 alro@alro.ro
230048-Slatina-ROMANIA Fax: +(40) 0249 411 487; 0249 415 992 www.alro.ro

cod 11/PO-051/Rev.0/2007